

CLAIM SUMMARY AND CLAIM AMENDMENTS

CLAIM 1 (UNAMENDED) In a system consisting of a cell phone, wireless network, and a base station, for cell communication packets having a formatted header containing information about the packet, said cell phone comprising a modulator/RF detector and a DSP, the improvement comprising means for transparent bi-directional translation of audio/video protocols into Internet standard protocols, thereby allowing directed attachment to other stream oriented protocol devices without interposed protocol translation while reducing complexity.

Claim 2 (currently amended) The improvement of Claim 1 wherein said means for transparent bi-directional translation of audio/video protocols into Internet standard protocols includes means for storing application contents of an incoming packet [in] into an cell phone application memory, means for comparing the incoming packet with a plurality of predetermined patterns stored in a content addressable memory to identify a matching pattern; means for processing the incoming packets simultaneously with said comparing means for determining whether or not the packet including all embedded layers of protocol, is valid; means operative upon a matching pattern being identified and the packet being determined valid for processing said packet in accordance with the identified pattern; and means operative upon failing to identify a matching pattern or upon determining the packet

to be invalid for processing said packet in a software process.

CLAIM 3 (UNAMENDED) A method of accelerating a stream-oriented network transport protocol involving a system having a cell phone, wireless network, and a base station, for cell communication packets having a formatted header containing information about the packet, said cell phone comprising a modulator/RF detector and a DSP, means for transparent bi-directional translation of audio/video protocols into Internet standard protocols, thereby allowing direct attachment to other stream oriented network protocol devices without interposed protocol translation while reducing complexity, the method comprising analyzing packet traffic on the wireless network to identify classes of predictable protocols which characterize a majority of such packets; implementing programmable hardware logic to process such classes of protocols, said programmable logic being clocked at a rate corresponding to a signaling rate on the network; analyzing the header of a packet to identify one of said classes to which said classes to which said packet belongs; controlling said programmable logic in accordance with the identified class to process the packets; and processing in software routines instead of said programmable logic packets which do not belong to one of said plurality of classes.

CLAIM 4 (UNAMENDED) In a system consisting of a cell phone, wireless network, base station, and gateway to Internet networks, for cell communication packets having a formatted header containing information

about the packet, said gateway comprising a wireless network protocol attachment, a protocol translation application, and a Internet network attachment, the improvement comprising means for transparent bi-directional translation of audio/video protocols into Internet standard protocols, thereby allowing direct attachment to other stream oriented network protocol devices without interposed protocol translation while reducing complexity.

Claim 5 (currently amended) The improvement of Claim 4 wherein said means for transparent bi-directional translation of audio/video protocols into Internet standard protocols includes means for storing application contents of an incoming packet [in] into [an] a gateway application memory; means for comparing the incoming packet with a plurality of predetermined patterns stored in a content addressable memory to identify a matching pattern; means for processing the incoming packets simultaneously with said comparing means for determining whether or not the packet including all embedded layers of protocol, is valid; means operative upon a matching pattern being identified and the packet being determined valid for processing said packet in accordance with the identified pattern; and means operative upon failing to identify a matching pattern or upon determining the packet to be invalid for process said packet in a software process.

CLAIM 6 (CURRENTLY ALLOWED) A method of accelerating a

stream-oriented network transport protocol involving a system having a cell phone, wireless network, base station, and a gateway, for data packets having a formatted header containing information about the packet, said gateway comprising a wireless network protocol attachment, a protocol translation application, and a Internet network attachment means for transparent bi-directional translation of audio/video protocols into Internet standard protocols, thereby allowing direct attachment to other stream oriented network protocol devices without interposed protocol translation while reducing complexity, the method comprising analyzing packet traffic on the network to identify classes of predictable protocols which characterize a majority of such packets; implementing programmable hardware logic to process such classes of protocols, said programmable logic being clocked at a rate corresponding to a signaling rate on the network; analyzing the header of a packet to identify one of said classes to which said packet belongs; controlling said programmable logic in accordance with the identified class to process the packets; and processing in software routines instead of said programmable logic packets which do not belong to one of said plurality of classes.

RESPECTFULLY SUBMITTED

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